Jaclyn (00:04.014)
Hey everyone, and welcome to today's special edition of the Dutch podcast. I'm really excited to have probably the most special guest we could have on. I have to say that because he's my boss. I'm paid to say that. My boss, Mark Newman, the CEO and founder of the Dutch test of precision analytical. We're really excited to talk today. We have had so much going on in 2024. We want to just recap that, remind you of all the new resources that are out here, but then most importantly,

Mark Newman (00:13.262)
pay her to say that.

Jaclyn (00:32.024)
kind of tease some of the things that we're gonna be doing next year. Some of these are really big and you're gonna wanna know what's going on. So Mark, thank you so much for joining me today. Really appreciate your time.

Mark Newman (00:43.652)
Yeah, happy to be here. feel like, it feels like we just did this end of the year thing, like a couple weeks ago or something. So time is flying as usual.

Jaclyn (00:50.702)
It does feel that way. And the funny thing is that when we look at the list of all the things that have gotten done, yeah, it feels amazing. can get that all done in that busy week. So I want to start by just talking about some key highlights from last year. Of course, you know, we continue to grow as a business. Our team is growing. We love talking with all of our customers and learning the ways they're using the Dutch test. What are some of the things that were really highlights for you in 2024?

Mark Newman (00:59.044)
Yeah, right, absolutely. Well done.

Mark Newman (01:19.874)
I think this last year, education was a big focus for us both in terms of the resources that we have available to them and then how we're actually disseminating those. So we just launched our new website here just weeks ago, which has been a long time coming for us in terms of just kind of spending years like jamming all of this good content into too close of a space and with layers that aren't connected as intuitively as they need to be. And so with that, we've got a new education hub with more orderly excellent education that people can self-serve the different topics that you know one of the challenges with our test always is there are lots of layers to it and you know the learning process for us internally never ends and we want to make sure and extend that process to the people that are sort of on this journey with us so that's been a key for us and when we get to next year you know we've got some some really fun updates in terms of

of education, but that's been, I think, a key for us is really to keep pushing on the education, both with content that you can just go and self-serve and then also podcasts and webinars and just getting experts in the industry to teach us and to teach everybody just a fuller understanding of this whole functional endocrine story.

Jaclyn (02:30.968)
Yeah.

Jaclyn (02:36.046)
I'm so glad that you started by bringing up the website, because I think when it comes to customers and all of you guys that are listening, whether you're a patient or you're a provider listening, probably the web update is going to be one of the most impactful things that you experience and how you interact with Dutch. if you have ever gone to try to look for learning on a particular topic, before everything lived in one big place. And so you would really have to scroll to try to find what you were looking for and mark what you described with that education hub.

What we've done is we surveyed customers for their top uses for the Dutch test and we took the top 20 and we built out pages where all the content lives for those topics. And this is only the first iteration. We have big plans for how we're going to enhance and make each of those pages better. But now if you want to look up PMS or PCOS or menopause, you can click on that clinical topic and all the information, articles, blogs, videos, prior webinars, courses, trainings, everything lives.

in one place so you can really quickly see what's out there. And I think that's going to be a game changer for people.

Mark Newman (03:41.988)
Yeah, absolutely. And that's our sort of informal education. And then on the more formal side, we had a publication just come out recently, which we're always excited about getting more of our data into the peer-reviewed literature. And the trail end of last year, so the conversation has been this year, but the publication was last year, was our big menopause paper, which really looked at transdermal estrogen in different formulations and how the urine looks, urine results look with that. And so we spent a lot of this year sort of discussing that and overlaying what else is in the literature in terms of clinical data that we think aligns really well with that. So that conversation we continue to push forward. And that's the conversation about estrogen and do I have enough? And then the conversation from there is, where does it go? And how does that impact us? And so the more recent publication in BMC Integrative Medicine, is a look at women in the premenopausal phase of life with and without products that contain dim diendymethane. So that, as most of our clients know and use, know, pushes that estrogen metabolism around and moves it more towards the two hydroxy side of things. And so there were some really interesting findings in that.

We've got a paper right behind that that's sort of the same topic, but then shifting into the HRT side of things. So we published our HRT data, then a look at what does it look like when women are manipulating their phase one metabolism with these products and then to follow that up sort of combining the two. We'll be excited to see that hopefully coming through this next year is what do women look like who are on both estrogen therapy and then with and without DIMM to see what the impacts of and just as a sneak peek what you can see is you sort of effectively lower your dose of estrogen therapy when you're also on a nutraceutical that's sort of that estrogen down what is thought to be that good metabolism pathway, that two hydroxy pathway. So that's more on the formal education side of things and in terms of validating the clinical utility of the test. We're always excited to get our peer review literature out and we've got a whole team that continues to dig through our data to try to get those findings out there, both to educate on, what happens when you take DIMM? But also in just showing the utility of

Mark Newman (06:04.368)
of the testing itself.

Jaclyn (06:06.124)
Yeah, and I'm really, it's exciting to be able to publish some therapeutic literature as well. I mean, we have such a huge population of women, like that dim in cycling females, there were 19,000 women in that study. Like this isn't small, like compared to most studies like that in our industry, it's a huge number of N, know, a huge number of subjects, which is really cool to be able to conglomerate that. And I think...

Mark Newman (06:19.237)
Right.

Jaclyn (06:31.966)
know, readers, can access that through the website dutchtest.com slash research. And you can link to the full text of the paper. But some of the images are going to be familiar because we did use the Dutch dials to show before and afters. And so it makes it really easy as a clinician to really see the changes. Now, one change that I would think we should address is that we did see, when you look at the absolute value, we saw an increase of the 4-OH-E1 metabolite. And I think that could kind of surprise providers at the outset, but it's important to kind of take that in context. Can you talk about that a little bit?

Mark Newman (07:05.156)
Yeah, it was a little bit surprising. I've heard people say over and over again, if you take these products, it increases your two hydroxy and it lowers your 16 hydroxy and your four hydroxy. And that's that carcinogenic metabolite that has the potential to create the oxidative quinone and then to basically pull a piece of your DNA off and therein lies the mechanism of potential increased cancer risk.

And what we saw is, mean, what we've always said is, you know, the literature is a little bit mixed on that. And so we don't really know what that's going to look like. so a couple of interesting things is one, the four hydroxy, I think in the average woman went up almost 10 percent and the two hydroxy went up significantly more than that. But that still there's an interesting story there. And then also we have to be honest about the data that we have, which is a bit of a dirty data set. Right. These are women taking DIMM, some of which are also taking you know, some other products, some of them may have some I3C in there. And so it also pushes us towards more research of using the test, not just in a clinical sense, but also in a research setting to allow the industry to dig further to say, well, you know, can we get specific with these products over time and see if some maybe have an extra favorable, let's say profile of pushing more down that SIP1A1 pathway and that two hydroxy pathway.

Jaclyn (08:25.39)
Hmm.

Mark Newman (08:30.704)
and not so much down the 1B1 pathway, but those molecules are really similar. You know, take estrogen and you put an extra hydroxy group here or you put it there, either way you can get a quinone. So the fact that they're similar to each other is related to the impact that they have because the 2-hydroxy also can attach to your DNA, but it's friendly and it lets go. And the 4-hydroxy creates this stronger bond and so it's more likely to...actually, or that's at least my understanding of how the literature kind of lays out this competitive relationship of sorts between the two. And I'm not sure that's a perfect description of what's going on biochemically, but there's something interesting there in the cancer protective properties of the two hydroxy and then one step further to the two methoxy, both of those relevant to that. so, yeah, so there's a really interesting story unfolding there. This is not the end of the story.

Jaclyn (09:20.59)
Bye.

Mark Newman (09:25.508)
So, and that's where we want to continue to push and just, you know, as a community, just continue to pursue truth in terms of what impact we can have on patients with different types of treatments. And some of those, there's still some learning yet to be done. so, and that's again, is why we look forward to the future as we get to continue to dig on those things, educate ourselves and educate the industry on the relevance of all those things.

Jaclyn (09:51.01)
Definitely. So on top of the publications, we've put out, I don't know if you know this, that when this launches, this today is our 85th podcast. Isn't that crazy? That's a lot of really

smart guests that we've been lucky enough to have on our podcast. We also put out 10 webinars this year. The topics ranged from menopause myths to the root causes of acne.

Mark Newman (10:01.934)
Wow, that's awesome. Yeah.

Jaclyn (10:16.23)
progesterone kind of being that Goldilocks hormone, not too little, not too much, but just the right amount. We talked about microbiome. We've had the chance to cover such a wide variety of topics. And our most viewed webinar, you can still access through our website, was with Dr. Tori Hudson. She did one on menopause, perimenopause, and menopausal hormone therapy myths and misconceptions, which was a really well-researched presentation, really helping people with some of those challenging questions that come up around that time.

Mark Newman (10:48.516)
Yeah, well, and that's one of the nice things about having a test that's comprehensive is there are just layers and layers of conversations that we can have about, you you mentioned the microbiome, you know, one of the things we've found that sort of fell out of our data that we haven't yet published is, you know, the Indicant marker that we've added that speaks to, there might be something going on in the gut. You know, we see with those being elevated, higher levels of estrogen. And there's a story there, you know, as far as, you know, what you might call phase three metabolism in terms of having a gut issue and having estrogen, can you clear it well or not? Like they're just sort of endless, interesting stories. And some of those are definitely complex enough that it's nice to bring some outside educators in to talk about melatonin or microbiome or metabolism of whatever hormone it might be and all the interrelatedness of what makes what we do so really interesting.

Jaclyn (11:40.492)
Yeah, I completely agree. And the work on the microbiome this year, just in general, clinically and in the research space, has been really interesting because there has been a shift towards the female reproductive microbiome, both in reproductive organs, like the uterus, the fallopian tubes, follicular fluid, et cetera, but then also the role and the impact of the gut microbiome on women's health conditions. There was one paper published, gosh, I want to say in February, this really nice review.

If I can get the link to it, I'll drop it in the show notes for everyone if you want to click on it. But it really made the connection between endometriosis and the microbiome, the gut microbiome. And we've always talked about the gut microbiome being kind of the root of inflammation. 70 to 80 % of our immune system is in our GALT, our gut-associated lymphoid tissue. And so hyperstimulation of that GALT by gut inflammation becomes systemic and can affect the function of reproductive organs. And of course, in that way, it

influences hormone levels and probably a big piece of why we see that endocrine tied to estradiol levels on the Dutch chest, which is such a fascinating connection.

Mark Newman (12:50.68)
Right, yeah, and then you've got the connection between the inflammation that can push that tryptophan down that kynurenine pathway, which might give you less serotonin, it might give you less of some of the markers that we see on the Dutch test, like the xanthurinic acid and the kynurenate acid, particularly if you're B6 deficient. so just, yeah, all those tie-ins are always what makes it so interesting to look under the hood of all the endocrine-related markers that we get to see.

Jaclyn (13:15.96)
Yeah, so I want to give a big thank you to all the podcast guests we've had this year. Obviously, I can't list all of them, but we've had some really wonderful guests. Lakisha McMillan, Carrie Jones, Anna Kabeca, Sarah Zall, Tom Williams, Kieran Krishnan, Mindy Peltz. I mean, I could go on. We've had some really fascinating conversations and, we have had about 250,000 downloads now at this point of our podcast. So it's really grown. Obviously people love hearing from our guests and it's been just such a fabulous part of 2024. We do release them every Tuesday. So make sure that you're following us and wherever you listen to podcasts and make sure you tune in for 2025, because the podcasts are only going to get better and grow even more. So I want to shift and talk a little bit about conferences, because we've also attended dozens of conferences this last year. Any that have really stood out to you that have been just really on point or really interesting industry.

Mark Newman (14:01.817)
Absolutely.

Jaclyn (14:15.726)
learnings that you've gotten.

Mark Newman (14:18.298)
Yeah, for me, think the big three for us are always A4M in their various forms and then IFM and PLMI. Those three are always a lot of fun. A lot of the names you just said, that's where we run into a lot of those people regularly. And so it's always interesting to pick their brains and always come away from those, just learning more about all of that. just...had a little pre-conference workshop ourselves at A4M and got to listen to, you mentioned Tom Williams, got to listen to him kind of do his thing in terms of just unpacking all the complexities of the HPA axis and everything that's going on with the stress response that we see in our testing and then the layers of it that we don't see that just is always just sort of astounding to just the interconnectedness to those things. So one of the things that I learned in just kind of putting together different things people were seeing is, which I would like to unpack a little bit next year, is the connection, there was a paper that came

out, I can't remember who was talking about it, but the relatedness between PCOS and the risk for autoimmunity, and then the risk that estrogen plays in that, just really interesting looking at when you take women with PCOS and without, know, the thing that we see in our tests, which is really interesting and known, is you get higher levels of androgens lower levels of progesterone and then those five alpha metabolites on the androgens we see push a bit more, which is all driven by the insulin story. And that's known. And then if you split the PCOS and the controls, you don't tend to see an estrogen story there. But then when you focus in on that PCOS group and you split them into those with thyroid antibodies and not, so this connection with Hashimoto's in terms of that, you see the higher estrogen women having higher prevalence of Hashimoto's.

And that's a story I'd like to see unpack a little bit more this next year. And I'm forgetting who was actually discussing that along the way. looking at how estrus... So it's interesting because we look at... I tend to think in terms of classes of people, Like PCOS and not. But then what we do is individualize. And so it's such a really good story of that. Of the PCOS group is set apart. But then within the PCOS group on an individual level, what your estrogen levels are doing puts you at potentially higher risk.

Mark Newman (16:42.276)
for autoimmunity and then depending on how well the progesterone balances that estrogen can exacerbate that. So yeah, we love going out with our education partners and just hearing what's new and what's, you know, the old things that we've been measuring for years, seeing some of these new layers of how the interrelatedness is unpacked a little bit further in terms of marker and marker, how they relate to each other. And then also, of course, how those things relate to disease risk and disease progression and that sort of thing. So it's always great to go out and see our clients and rub elbows a little bit with all of you that use our test and just continuing that sort of joint learning process together.

Jaclyn (17:23.918)
Absolutely. Now, one of the other things that to me feels like eons ago, but it was just 2024, was we made our first really significant change to our report in years. really since launch, you've added some analytes to the OATs, but this was an adjustment in how it's visualized. We changed all of our fan gauges to sliders, and we also added a more calculated ratio for the 2-4 and 2-16 estrogen metabolite. don't you remember that happened this year? I'm sure you're feeling the same. Yeah, in the last couple of weeks, we launched that too, right? So tell us a little bit about why that was such an important step for the report.

Mark Newman (17:57.252)
Yeah, was that two weeks ago also? Yeah.

Mark Newman (18:06.896)
Yeah, and I you know for me. It's it's not about kind of where we are, but where we're going with that You know we we like to speak of the virtues of the Dutch test But we also are like

constantly grappling with the things that are a struggle so and one of the things I would just give credit to your team this year is there was a struggle of how long it took people to get in and get on the phone with somebody and get some help and So we've added resources so people have less need of that and we've added staff to where it's just been great to hear that people are getting in really quickly to talk to your team when they need help. But part of the challenge with that is just making the report tell that story in an easier way. And so not to get too far ahead of ourselves, but we're in the middle of a three-step process of taking that report and I think really revolutionizing the way that it lays out so that the story that's in that test that you want to unfold for you is a lot easier for people to get to the bottom of and some of that is just changing the layout of some of the way things sit and the way those are visualized. then, so for now, we've taken, we've always had our little pie chart, which was a great way to look at the three-way relationship between those three pathways of phase one estrogen metabolism. So the more friendly two hydroxy, the potentially carcinogenic four hydroxy and the 16 hydroxy. So.

I always liked initially that that was represented in one sort of picture. The problem with that is when one of those pie pieces gets really out of balance, it's interesting and it's obvious. But then it's relevant when you ignore that one, the relationship between the other two. So for example, when the 16 is really big, you say, that's interesting. You make more of the 16-hydroxyestrogen. What does that mean? Well, there's a story there about the estrogenic impact of that metabolite. OK. But somewhat independent of that, there's a relationship between the two and the four as it relates to what we talked about before. What's going on at the DNA level, oxidative status, all this stuff, right? And then when the 16 is so dominant, it's really hard to tease out, well, how is the relationship between the two and the four as this 16 is, you know, being so dominant? Again, which is independently interesting. So we move that to two different ratios, which is also more consistent with the way the literature has been playing that out.

Jaclyn (20:30.04)
Mm.

Mark Newman (20:30.352)
because ultimately we want to be able to tie the changes that we make to the literature. The literature is laying it out that way so the relationship between 2 and 16 and the 2 and the 4 are both interesting but we wanted to be able to look at those independently. So that's been a change that we've made and then if we want to get a little bit ahead of what's coming next year while we're on topic, the phase 2 of this change

Jaclyn (20:54.018)
Sure, we can roll into that.

Mark Newman (21:00.272)

is going to be, let me think and make sure I get this right. I think we've got three major changes coming. One is that we talked about PCOS, right? And if I've got androgens and they're high or they're low, that's relevant. Also, it matters, do they go down that alpha androgenic pathway or do they go down the more, the much less androgenic beta pathway? And what the literature has unfolded since we started is that yes, the five alpha five beta sort of balance in terms of the way we relate it with those sliders is important. Yes, DHT is important because that's what ultimately we care about in this question is if testosterone gets turned into DHT, it's three to five, three to four times as potent. That's pretty relevant if you're trying to deal with high androgen symptoms. But what the literature has also made clear is that in the cell, DHT hits the androgen receptor and then before escaping, it gets turned into androstain dial, which has been this sort of like hidden little treasure.

Jaclyn (21:47.32)
Right.

Mark Newman (21:58.896)
on page two of the test. So yes, you can go look at it. Is it relevant? Absolutely. The one, maybe we can link to it in the notes or something, but.

Jaclyn (22:07.874)
Yeah, page two being the chart version, the table of results, not the infographic page. So a lot of people don't look there.

Mark Newman (22:10.82)
Just the table, not seen on the summary page, so it's not quick, and also not in the androgen metabolism page to see the relevance of it in that pathway. So there was a paper that came out a few years ago that showed that when you take PCOS women and compare them to controls, and just treating that as like, these are high androgen women in terms of symptoms and these aren't, what you find is that marker was uniquely valuable.

Jaclyn (22:16.461)
Right.

Mark Newman (22:39.926)
at basically saying, hey, you got some high androgen stuff going on here because it reflects intracellular DHT production. Anyways, so we're taking that marker and pulling it to the summary page, which will be coming out in this next year so that you can see quickly what this really valuable high androgen marker intracellular DHT, we want to see that. And then on page three, where you've got the testosterone breakdown, we're going to show that there as well. So that's going to be better.

Jaclyn (22:47.948)

Yeah.

Mark Newman (23:10.328)
to tell the androgen story.

Jaclyn (23:11.906)
Yeah, that's exciting. You highlighted that paper in a presentation that we gave in London. And that was a really fascinating one, because we talk about mind the gap a lot when it comes to whether a measurement is helpful, right? And meaning that if you were looking at cycling females and postmenopausal females and you measure estrogen, estradiol, you want to use a lab that can differentiate between cycling normal values and postmenopausal normal values. And we talk about it because saliva does not do a great job non-sensitive serum assays even sometimes don't do a great job, but urine and the ultra-sensitive serum do. So when I thought about that paper, I thought about that mind the gap concept because when you're looking at patients with PCOS, even like DHEA, DHEA sulfate, testosterone, and a lot of the metabolites had overlap of the normal range for women and then the range seen in women with PCOS except

Mark Newman (23:44.26)
Right.

Jaclyn (24:09.07)
5-alpha-andro, which makes it really unique, especially if you are unclear on a patient's PCOS diagnosis. That seems like it could really help to clarify what's going on.

Mark Newman (24:20.348)
I honestly found that data shocking even to say, this is a good marker for this to look at it. What it was was a 25th to 75th percentile range. So you say, here are the testosterone levels in PCOS women and here are the testosterone levels in healthy women. Is that valuable? Absolutely. But for the 5-alpha-andro, it looked like this, like a big gap between them to say, look, if you have high androgen stuff going on, this marker really pops, to say so crudely.

Jaclyn (24:40.355)
Right.

Mark Newman (24:49.764)
we should be looking at that more carefully. And so in that sort of thought pattern, the other thing that we're doing for the report coming in this next iteration is taking those premenopausal and postmenopausal ranges, and it's a little bit hard to describe verbally, but we're building them right into the dial. So if you look at the estradiol dial, you see the little postmenopausal range and then up between the stars in green, so purple and green you see the premenopausal range and this concept of mind the gap has always been look,

there's supposed to be a gap between the two. And what we know for the androgens is they're actually supposed to overlap, right? When you get older as a woman, your androgens don't fall off a cliff, they drift down, but it's meaningful. And so the new development of these androgen dials for both men and women, so for men it'll just be two age groups and for the women it'll be that premenopausal, postmenopausal group.

Is that so for example for testosterone the reference range will stay the same But you'll see the postmenopausal women and the premenopausal women as parts of that So you'll understand it more when you see it, but it's gonna be Yeah

Jaclyn (25:57.794)
Yeah, like the gradation. think that's, you know, you can see that it's, because it naturally declines over time. rather than having to reference a table for the age-dependent reference range, it's going to be kind of built in and make it a little easier.

Mark Newman (26:08.804)
Yeah, so you'll be more easily able to tell the story, hey, look, your results are lower than what a premenopausal woman is. Or for example, your results are lower than they were when you were younger and healthier, but you're still within the overall range for a postmenopausal woman. Or to say, hey, you know, for a postmenopausal woman, your androgens are actually relatively high, which in some cases might be a good thing because you're, you know, muscular and doing well. And in other cases, there might be an insulin story that's pushing some of those high but to just tell that story, we want the report to tell that story a little bit easier. this important androgen metabolite we're gonna bring right to the summary page, make the age tables built right into the dials in a way that I think will be really intuitive. And then third is we've always had this sort of mental exercise of you look at the free cortisol story, you look at the metabolites, and then in your brain you're supposed to go, that's either

Jaclyn (26:43.256)
Definitely.

Mark Newman (27:07.2)
Normal metabolism rates with they're kind of the same or if the free cortisol is low and the metabolites are high Which we might commonly see in like obesity or someone who's taken way too much thyroid you say You've got hyper clearance of your cortisol then in a low thyroid case You might see the free cortisol is high normal the metabolites are low normal and then there's this story that unfolds about cortisol clearance is sluggish so we've done the math for you and just put a slider right on the summary page that just makes that calculation to say your cortisol clearance is normalish, is on the higher side, is on the lower side. So as you're telling that story right on the summary page, you'll be able to sort of show and explain that to your patient. And then when you have a patient with a cortisol story that's dysfunctional and you're also dealing with their thyroid and as that changes

over time, as that's impacted by how you're treating your patients, you can see that in a little bit more intuitive way. So those are the three big changes that we have to follow. And then we're moving towards just an even easier way to get, know, for me, I l want the summary page of our report to tell the story a little bit more comprehensively in an easy way for providers to again, just be able to tell that story to patients. And I'm super excited for that because I think it's really going to help people just spend a little bit less time or maybe a lot less time with our report and still feel really confident about the fact that they're getting all the value out of all the markers that we're testing.

Jaclyn (28:43.628)
Yeah, I'm really excited about where that's headed and you're gonna get a teaser of that later today, of where we're headed with that, Mark. So, you've been waiting to see. Now, I think the other thing that you guys will all notice next year when we release this report that has those three scientific updates is that it's completely rebranded and it's so beautiful. And so, that'll probably be the first thing that jumps out even before you get into the details of the scientific changes and...

Mark Newman (28:50.274)
good. Thanks for the preview.

Mark Newman (29:06.51)
Yeah, yeah, yeah, I'm not a marketing guy, so I'm gonna focus on the science, but it is true. It looks prettier, so that's good.

Jaclyn (29:11.168)
It's so easy on the eyes, it's beautiful. The team, our team internally really loves it. It looks great and want to highlight the work that our designers have done to really revamp that because it's not easy. It was touching every single element of the report. So that team, again, we've really gotten to a cadence. You're going to be seeing more report updates at least one next year, possibly a second. But this is going to be the way we move forward is with these small adjustments that kind of keep us aligned and ahead and abreast of.

Mark Newman (29:16.506)
It looks really nice, yeah.

Jaclyn (29:40.759)
science.

Mark Newman (29:41.594)
Yeah, and there's a practical advantage to that too. think just, you your patients are spending their hard earned money on this. And I think just the cleaned up look of something that was, you know, was built in 2012. just, looks clean. And I think the story that

it tells is gonna just get clear, more clear over time. And I think that's gonna be a nice advantage as well. I'm excited to get those out into people's hands.

Jaclyn (30:08.686)
Definitely. Now the last thing about 2024, a new resource that I want to make sure that everyone knows about, we can't talk about it enough. I think this is the most excited I've seen our clinical team since the Interp Guide is the launch of our mini guides. Now, when people call into our team to ask for help, oftentimes they're looking at a condition that their patient's experiencing and they're interpreting the Dutch test in light of that chief complaint or condition like hair loss or perimenopause or...inflammation. And so what our team did was actually created checklists for the most common patterns and abnormal analytes seen for each type of condition or chief complaint that your patients come in with. So these are not diagnostic markers. It's not a diagnostic checklist. It's more about what we typically see. And it really can help you hone in when you're looking at that entire report at the most important components for your patient and how to interpret really thinking about that specific condition in mind. So those are available in the customer portal. So if you're a Dutch provider, you log into the portal, click on education, and you'll see those mini guides available to you. And I highly recommend, if you haven't checked them out, utilize them. Like use them hand in hand as you look through your patient's reports, because I think you're gonna find it really simplifies and focuses your interpretation. So we've talked about the report next year.

Mark Newman (31:27.152)
Yeah, absolutely.

Jaclyn (31:31.488)
Another big thing we have launching is our MHRT course. So I want you to just talk briefly about that. We actually have it live right now for some testing, and January 1st is going to be made available publicly. Tell us a little bit about why that course is so important.

Mark Newman (31:47.768)
It's a pretty relevant question actually for, I mean it's been like three days since I've been in the middle of an educational session where people are just saying disparate things and even from, with all due respect, even from the educators going forward to the learners, things being said that are pretty inconsistent with the literature.

And then there are things that are where we're still sort of learning as an industry. So these are not easy topics, but there's just so much confusion out there because there are old ideas that are good that we need to hang on to and stress. And then there are some old ideas where we need to scrutinize them against the literature and give up some of the things that were thought to be true in the past about whether a particular hormone therapy works or dosing or whatever it is. We've spent as a team a lot of time combing through the literature on how is HRT done well in an evidence-based way. Just starting with

the simple stuff of how do I take progesterone, even that as a concept is, again, and it's just fresh in my mind because I'm just coming off of hearing people say things based on one study when there are multiple studies that contradict it in terms of whether something works or whether it doesn't work and, you know.

It's hard to be impartial, but we're trying to be as agnostic as possible about like, I don't care how you take progesterone, it needs to work. And then there's the question of like, where do the labs speak into that? And in some places, they don't. And so it's okay for us to say, hey, here's what the labs have to say. That's not leverageable. And then we move on to a different part of the story and we say, aha, here the labs can be super leverageable. Here's how we look at them. And maybe that's a Dutch test. Maybe it's a serum test.

It depends on the situation. And so we're super passionate about helping people get that right. People come into this industry, you know, and sometimes they're already in hormone space, but maybe they're just moving to more of a bioidentical story or just starting to leverage lab testing where appropriate. But for a lot of them, it's sort of new ground, you know. I remember back in med school, and again, I'm not a doctor, but they remember back in med school, you know, that endocrine story, but maybe they've been in a different specialty for a while. And so they're relying on our industry.

Mark Newman (34:12.228)
to educate them on, let's do this hormone thing because the literature says that it's important, true, but the way that you do it also important, but it's complicated and there are a lot of things that need to be weeded through and to sort of get rid of the chaff and to make sure that we have a story that we're telling that's consistent with the literature and then just the simple how-tos and the practicality of dealing with patients when it comes to, you know, starting with the most popular, like relevant thing for just how do we get women on progesterone and estrogen and maybe a little DHEA, like that story, how do get that right? And how do we get it to where we can defend what we're doing with the literature? And how do we know where there is some uncertainty and unpack that for people and tell them where the literature is leading and what questions remain to be answered? So all of that, we distilled down into a course which was really well done.

So tip of the hat to you and your team in education, as well as our marketing and production teams. Just really proud of the job that was done on that. So that's going to be coming out here in really short order and super excited about that. And then we're going to continue to build on that story because there are lots of layers of that for us to unpack for all of you.

Jaclyn (35:24.536)
Definitely. Me too.

Jaclyn (35:32.566)

Yeah, and Dr. Kerry Jones and I present the course, but I want to just honor the work, Dr. Kelly Roof, Dr. Hillary Miller, and a wide variety of other people on our clinical team, and like you said, our production team that really spent the time digging through and reading every single study. We did not do an abstract skim to pull the data together. This was really deep critical analysis. It took us three months just to review the slides with you. I remember it's a six hour course because we really debated what the literature meant and what it meant for clinicians in integrative medicine and how we move forward with HRT.

Mark Newman (36:08.484)
Yeah, like what I yeah, I would just say like one of the things that impressed me about that is just in terms of process is testosterone belongs in this from your first glance of like, we got to talk about testosterone. And then when we dug into the literature, it's like, you know what? Like this is a this isn't a basic intermediate course. And then we're going to build out something for more of the complex topics. And as a user, you want testosterone.

Giving testosterone to be included because it's usually early in the conversation people start talking about yeah estrogen progesterone Maybe DHEA and maybe testosterone and it's it's some sometimes said somewhat flippantly like it's just no big deal to give people testosterone and testosterone therapy can be really effective, but it's not simple in the literature in terms of Dosing and how and testing and all of it's it's much more complex I think then the story of estrogen progesterone and and DHEA so we stuck with a lot of the FDA approved products that are bioidentical and we branched out from that some, but we're keeping that story kind of contained and making sure that when you get into more advanced topics that first we know which of these are more complex and have things that we really need to unpack for ourselves and for our listeners to make sure that you're on really solid footing when you start down a path with a patient because there are risks to not doing HRT and there are risks to doing HRT and the how is really, really important. And so we want to arm people with really solid information on that. was just, I was really impressed with how the team made the decisions they did of what's included in this. And then again, we're going to keep kind of building on those concentric circles of complexity when it comes to the treatment of, you know, that phase of life with hormones.

Jaclyn (37:55.566)
Absolutely. So as we look into next year, I mean, think one thing that stands out to me about Dutch, about precision, is as far as places I've worked and my colleagues have worked, it really stands out as a mission and value driven organization. And I think, you know, we see that some of the ways that I see it, for example, are like, you guys cover all of our health care for us and our children or families. We don't pay a premium on that as an employee taking care of our customers by investing in the business in ways like making sure our consults are easily accessible, giving back a lot to nonprofit organizations in the industry as well. There's so much that you do that I see living out the values. But we have this mission statement, right, to profoundly change one life and then a million more. And I want to really hear from you as we move into 2025.

How are we going to stay true to those core values or advance the way we put them in action in the world? What are the ways that you're most excited to see that go forward next year?

Mark Newman (38:58.208)
good question. You know, I think the, I guess I tend to be maybe cynical and negative sometimes. And I think it's okay to look at this from a negative standpoint is like, how are we missing those opportunities? And to me, the biggest missed opportunities is to like listen to a doctor tell a story of unpacking things from our test and our report and to sort of see it with them in retrospect and then to go, yeah, you got that. But then for myself, having looked at like a gazillion of these things, to also see added value in that, that they missed because it's complex and because we haven't done as well as we can long-term in teeing up for them an easier way to understand and unpack the different layers and levels of value that you can get out of the testing. I think that's...like a big passion of mine and why we are focused so much on reporting, education, and then as we move forward, how do you merge those two together to make knowing accessible? First for the provider and then for the patient because there's a ton of value in the things that we test. But the connections between all of this complex stuff that makes up the patient and all of these complex markers

Jaclyn (40:06.126)
Hmm.

Mark Newman (40:23.152)
that make up their biochemistry, it's easy to miss stuff. And so that's for me a passion of mine is in this next horizon of learning and building and educating is how do we arm all of our providers with the ability to extract from what we're doing as much information as is sitting there staring at them. It's just, in fairness, they're complex interactions and relationships and all of that. So I think that for me is where there's a significant amount of potential left on the table that we can go and help people to achieve better outcomes for the thousands and thousands of people that are putting their trust in what we do. And we want to just continue to do it better from an analytical standpoint, interpretive standpoint, and then assisting with the treatment. And one of those things that we've critiqued over the years is we put a lot of energy into putting a treatment guide together for people.

And then as we got to looking at it, we're like, this is good, but it needs to be great. And so that's one of the things we actually pulled off the shelf and that we're, we, you, your team is retooling, I think with a lot, like just as much love and care as we put into the HRG course and these other things. And it takes a lot of time and a lot of digging through the literature and making sure there are no sacred cows, know, making sure that this thing that we thought was true.

Jaclyn (41:24.718)
Hmm.

Mark Newman (41:49.24)
in 2014 or whatever about the connection between X and Y and this condition and whatever, staying on top of the literature and giving up the things that we wish were true that aren't. And then finding new truths and new things that are relevant and leverageable in the testing. So think that's for me is just kind of continuing to push into extracting as much value as we can out of what we're doing for our clients. That's a huge passion of ours.

Jaclyn (42:16.046)
That's great. And I would never call you critical or negative. I would just say you have a commitment to excellence, and that's what drives all of us in the building to really be pushing to do better for our customers and our patients. just be open to that reframe, because I think that that commitment to it is what has brought Dutch where it is today and where it's going to push us to continue to develop really the best hormone testing in the industry in the next 10 years as well.

Mark Newman (42:28.4)
Yeah, absolutely.

Mark Newman (42:41.603)
Absolutely.

Jaclyn (42:43.586)
Thank you guys all for joining me today and Mark, thank you very much for joining me. I know it's a very busy week and I'll always love having you on the podcast.

Make sure that you check out our educational hub at DutchTest.com. It literally launched in December. It's brand new. It's hot off the press. So make sure you take a look and check out all of their favorite resources you have in a new, easy to access form. And I hope you stay tuned with us as we move into 2025. Look forward to a lot of podcast guests. I look forward to spending time with each and every one of you. Thanks so much.